SAFETY

APRIL 1960

Two Sections • Section One

Education

A MAGAZINE FOR TEACHERS AND ADMINISTRATORS

Close calls are symptoms

The man phoned his doctor, "I've had a pain in my stomach, Doc. What should I buy to get rid of it?" Although the physician could have rattled off a list of reliefs, he didn't. He didn't want to eliminate the *pain*. He answered, "Why don't you stop in to let me look at it."

The pain to the doctor was not the difficulty to be cleared up. This chronic ache was a danger signal, a symptom which told him that somewhere in this man's body something was going wrong. Eliminating the danger sign wouldn't right the wrong.

While physical symptoms alert us to bodily problems, other symptoms can alert us to other wrongs—faulty habits, attitudes or behaviors.

What safety people call near accidents are really symptoms. "That was a close call," we say. Whatever it was, it was no close call, but a call to attention. Someone was doing something radically wrong and almost had an accident. Close calls occur daily in schools and are quickly forgotten. But they shouldn't be.

Minor accidents are also symptoms. A non-injurious fall is like a pain—and could someday lead to something serious. Minor cuts, bruises or falls seldom get a second thought. They aren't listed on accident records and children probably don't even mention them to their parents. But they are clear indications that the child hasn't learned the proper method or correct manner.

We ought to heed close calls and minor accidents as symptoms and take their warnings that worse incidents can happen if the cause is not cured.

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SAFETY Education

A MAGAZINE FOR TEACHERS AND ADMINISTRATORS

Volume XXXIX No. 8 Section One

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By Nancy Margolis

Rx for Action:

Teen Traffic Safety Conferences!

WHEN young minds spout forth, ideas are fresh, original and unconventional. Capturing their imagination, these ideas inspire the young folks to want more. When interested, young people seldom drop a plan—they build and develop it.

To capitalize on this energetic enthusiasm, to cultivate it, mature it and channel it into solving the teenage driving problem are the philosophies behind teenage traffic safety conferences.

Pragmatically, teen conferences are sponsored to give high school students a better understanding of the complexities of the traffic problem, to activate them to do something about it and to help create more public awareness of the accident prevention movement. By bringing students together in an atmosphere of free expression and adding sound educational guidance, teenagers hopefully will develop mature attitudes for safer living.

Skimming through a great number of conferences throughout the country, we find similarities in all, but the unique features shine. Alike, and yet always unique are the young people and their blossoming sincerity in wanting to help adult citizens cure the highway safety headache. Different are the many shapes, sizes, formats and developments of the conferences, themselves.

After conferences, teenage delegates carry their enthusiasm back to their high schools. From all-school assemblies to private bull sessions, the action and interest of the conference reaches the students. In Hammond, Ind., after discussing the merits of a youth traffic court, "we would have to face our own friends with our violations," they set out to investigate the mechanics of establishing a court. Some students graduated; others moved into leadership. At the next conference final plans were made and the students will soon see their recommendation a reality.

One week after the Siouxland (Iowa) conference, a high school held a special all-school assembly to discuss the meetings and start the traffic safety ball rolling through that school.

Ideas to borrow with interest (to all). This round-up of local, county and state student meetings in the last eight years offers valuable ideas for people initiating or continuing teen traffic safety conferences.

Others soon followed suit. At the second Clark County, Wash., conference, delegates learned the good news that the teenage traffic accident rate had dropped just since their first conference. On the state level, after the second Colorado Teenage Conference, a Colorado Teenage Traffic Safety Association was organized. With a formal constitution, the teens now have clubs all over the state, discussing traffic problems and doing something about them. Likewise, following the first conference in Stockton, Calif., and the state conference in Iowa, teenage driving clubs were started. In three months, 40 clubs existed in Iowa. A similar organization born from a conference is found in Florida, where the youth aim to have a safety council in every high school.

Driver education and its benefits and necessities were big topics for discussion at most, if not all, conferences. Recommendations of the youth in this area will come later, but apparently the talks had something to do with the sharp rise in driver ed enrollment since the first teen conference in 1952. Figures aren't complete; however, according to the Association of Casualty and Surety Cos., driver ed students numbered 788,981 in the 1952-53 school year. Last September this figure shot up to 1,338,246. This rise of course, includes schools which have recently added the course to their curriculum, conceivably after students expressed their interest.

These are but a minute sampling of the results, progress and effects of student conferences. We could never measure or even recognize the most profound results—the effects on the young individuals involved, in maturing attitudes and broadening experiences.

The pioneer state in this movement was Colorado, holding a one day conference in August of 1952. This day was entirely planned *for* the teenagers by the state highway safety council, but one action set the pattern for other state and local conferences: the appointment, by the conference president, of a teenage committee to plan the second annual convention. Other states—California, Florida, Arkansas and Wyoming—saw the merit in this and followed suit. Chicago and then other cities jumped on the bandwagon to bring these experiences to the

Hot Tips for Conference Planners

- Planning group should represent all youth groups in the community.
- Involve teenagers in all stages of planning—but provide adult counsel so the teens will feel they're contributing to community problems.
- Give teen delegates background info long before their discussions.
- Discuss problems within teenagers' realm of action.
- Obtain wholehearted support of the schools, since delegates will most likely be representing schools.
- Emphasize maximum youth representation with minimum adults.
- Start early — allow at least two or three months to plan.
- Good idea — select some delegates from lower classes for continuity.
- Arrange for two general sessions — a beginning orientation and a near-end round-up.
- Rest of conference can be workshops or discussions with teens acting as discussion leaders. They're capable — let 'em preside.
- Encourage a definite structure established for follow-up.

"home folks." In Wyoming, the first teenage conference was part of the governor's highway safety meeting, and in Arkansas, the teens first met during the state safety council convention.

In the first year, 11 conferences were held, after which 10 said they definitely planned to make this an annual event—four even set the date.

Similar ideas, one might think, would originate in similar ways, but the germinating factors for conferences are almost as many as their number. In St. Joseph, Mo., someone on the traffic safety committee of the safety council mentioned the possibility to the chairman of the school and child safety committee, who then approached high school principals. In Sioux City, Iowa, the teen traffic problem was heard around the Junior Red Cross council. Representatives took this talk back to their home rooms, and, as expected, a teenage traffic conference was requested. Here, the Red Cross representatives acted as co-chairmen for the conference.

Sponsors are just as numerous, ranging from local safety councils, boards of education, auto clubs and dealers, PTA, and civic clubs, such as the Jaycees, Rotary, to state departments of education, state universities and state highway safety committees and councils. No work has ever been stifled because of lack of funds in this area.

Once sponsors have been determined, the planning becomes the most important item for the months preceding the conference. Irvin H. Himmele, assistant superintendent, Buffalo Public Schools, N. Y., wrote of his program:

"The cooperative planning of the Inter-High School Student Council of the Buffalo Public Schools and the Catholic Inter-High School Student Council set up a most successful teenage traffic safety conference for Erie County last December. This was the fifth annual meeting, but the first conference for which there was cooperative planning by the two inter-high school student councils. Sixty-two of the 68 high schools had representatives, who promoted safety programs in their high schools, affecting more than 55,000 teens.

"Teenagers, themselves, are concerned about traffic safety and the poor record of their age group," Himmele continued. "The resolutions they adopted reflect the attitudes of these teenage leaders. For example, they recognized the effect of the accident record on insurance rates and stated, 'If we expect our insurance rates to be reduced, we must agree to abide by all traffic regulations and to practice safe driving habits recommended in our teenage traffic code.' This code was adopted at the third conference, and this year arrangements were made with a city newspaper to print 55,000 Crusade for Safety wallet cards to distribute in all the high schools.

"The value of this type of safety conference is reflected in the enthusiasm which is displayed by these young people in the discussion groups, in the general debates on their resolutions and in the action programs which they have set in motion in their schools."

Erie County's experience, though not unique, is a good example of students' recommending the need for specific teenage action. At most conferences, group discussions and workshops

Chairman challenges youth to take the fight against traffic tolls to their own schools.

Students deal with seriousness of the problem in a serious manner. For some here, it may be their first view into the tragic traffic problem.

evolve into recommendations. But too often the students are enthusiastically carried away into areas beyond their jurisdiction. Their first experience in tackling this traffic safety business usually sees them overstepping their grounds. At many "first annual conferences" the teens plug for such complicated dynamics as standardized road signs over the country, stricter enforcement, tougher penalties. On the whole, the youth are more severe than adults in recommending enforcement of traffic laws. But then at their "second annual" they seem to come back to earth, concentrate on their own problems as teenagers, and center their discussions around the action that they can take as individuals, as councils and schools.

At all the conferences, the students have upheld and encouraged driver education in the schools. In fact, more than half have asked that driver education be mandatory before getting a license up to the age of 18. About half of these have recommended that driver education be required in the high schools. St. Joe and Chicago teens asked for this back in 1953, while Clark County, Wash., suggested that driver education be in all high schools. Although Western Massachusetts high school conference got a bit bogged down in plateaus of improving motor vehicle laws, it did recommend compulsory driver ed in schools, as did the Onondago County Conference last year.

But recommendations, such as required driver education, are usually the benediction of conferences. The primary kickoff—the planning—can determine the success of the teen venture. First conferences find adult leadership taking a more directive approach, with the students holding the helm the following years. But the "grown-ups" know their ace in the hole is still using student leaders to interest and encourage participation, and they know these leaders should represent all youth groups in the community (or state). Sometimes high schools send representatives to be on the planning committee; often they are the editors of school papers or student council presidents. But they're always leaders—the ones who hold the respect and admiration of fellow students.

Texas held a four-day conference in '53, and made it practically a leadership training program. The delegates learned how to go back to their home towns and hold similar traffic safety workshops for the local students. The reverse was the case in Iowa, where local clubs selected delegates for the local conference, which in turn chose their representatives for the state meeting. At the Duluth conference two years ago, students were given a training session in group discussion by a University of Minnesota professor, so they could carry on this traffic safety promotion in their own high schools. Youth leaders in Sioux City, Iowa, had similar training a week before their conference from a discussion techniques man from the public schools. Armed with this knowledge, they acted as the group discussion leaders for their meeting.

Student leaders help develop the conference agenda, topics for group discussions and possible speakers, using past conferences as yardsticks. In 1953, a national teenage coordinating committee met in Washington and debated the merits of setting up a national blueprint for organizing teen conferences. They decided then

This teen panel in Chicago discusses driver education. Each youth spent weeks investigating the merits and benefits to relate to delegates.

Young ladies play as active a role as the men in stimulating youth to traffic safety action.

Student chairmen discuss kit material with an adult advisor before the Washington teenage traffic safety conference.

—and most traffic safety officials and educators still agree—that such a standard is not advisable. Local and state groups ought to develop their own formats to fit their own needs. New approaches are always encouraged — and welcomed!

But the students need background info before plunging into debates and discussions on traffic safety. Chicago started the kit idea—compiling facts, pamphlets, reference guides and discussion topics to give to student delegates. In Duluth, group discussion topics were sent to the high schools for consideration and debate before the conference. Homerooms and student councils tackled the problems, resulting in all students identifying with the conference and its actions. Preparing the state-wide Maine meeting, all schools were asked for program suggestions. Council meetings, caucuses and even bull sessions over the state offered up good topics which became the discussion questions for the conference, meeting in the state senate.

Pennsylvania's teenage traffic safety conference day found the whole state involved as 14 area conferences met simultaneously at teachers' colleges. Each small conference brought recommendations to the state meeting later that day. Included in the kits from Kansas last year was "how to do it" material, dealing with how to conduct a bike check, organize a teenage driving club, a jay walking survey, a pedestrian violations survey and how to study driver observations of stop signs. Armed with this, delegates were ready to set up local safety programs.

Delegates to many conferences often do much research before the day or days of the discussion groups, aided by kits and other materials from the planning committee. This is highly commendable from the standpoint of promoting wider interest and understanding among more students as well as having sounder proposals and actions recommended at the conference.

A few of the teenage conferences used the sensational to attract student attention. New Mexico elected a safety queen and toured a jet hangar to learn air safety tips. Clark County, Wash., held safety contests — poster, slogan, skits and custom cars. Kansas selected a state safety queen, and held a Governor's Safety Ball at which the queen candidates gave five minute safety talks. This state conference also heard an auto racer discuss accident prevention and a man crippled by an auto accident give a few tips. Rochester and Monroe County decided to call all unsafe teen drivers "squirrel drivers" to embarrass them into driving better.

But on the whole, the students preferred not mixing pleasure with business, but rather wished to deal with the seriousness of the teen driving problem in a serious manner. Planning com-

Workshops tackling various problems in Worchester, Mass., conference give all teens chance to contribute ideas and plans for action.

mittees did concentrated work from one to four months, some of course, meeting periodically for a year—from one conference to the next. There's no general rule of thumb regarding the format of conferences either. Usually both adults and students speak at general sessions and then the conferences break into smaller discussion groups. Some permit adults to attend; others let the adults talk—and still others have adults act only as advisors or resource people to speak when spoken to.

Recommendations from these conferences are the students' own well-pondered decisions. In St. Joe, Mo., the teens felt parents shouldn't give students cars—they should be seniors before owning, and then only if they buy and maintain it themselves. On drinking drivers, they said that group pressure can help eliminate this menace.

A rotating trophy for the Sioux City school with the lowest accident rate was set up at the local conference. The students asked that the police department give each school a list of violations involving high school drivers. Clark County students were one group of many over the country discussing hot rods and drag strips. A few conferences endorsed drag strips as good for teens to work off energy off the highways. But many others felt that driving clubs dealing with traffic laws, maintenance and student problems might be more beneficial. Some conferences, like Rochester and Monroe County, provoked much thought with discussions on attitudes and habits and the driver vs. distraction. And Clark County stimulated interest with "drivers of the future"—new safety features of the cars today and tomorrow.

At Carbondale, Ill., high school delegates saw a number of safety demonstrations—all adult demonstrated—covering recreation, guns, home and traffic safety. Likewise in Jackson County last year, three safety demonstrations were held. Central Michigan teenage discussions brought into the picture alcohol and driving, while another session talked about safety projects for high schools.

But the real action begins when the conference is over. Follow-up is even more important than is the planning. Reports are usually written records to aid the next year's planners. Many conferences send reports to all discussion leaders or as in St. Joe, to local high school principals for class discussion. Clark County held a post-conference meeting with just the underclassmen attending—the ones who would be the next year's leaders. Illinois gave all delegates material on where to go for assistance in organizing local conferences, traffic safety workshops and other projects. Louisiana set up a constitution for organizing local teenage traffic safety organizations.

This round-up certainly doesn't attempt to cover all the local, county and state conferences during the past eight years. And many new ones are being planned while this goes to press. For the first time, a national teenage traffic safety conference was tried last year. But educators and youth leaders still believe—and experience has proven them right—that the most value and the greatest benefits are derived from the conferences that reach the students personally. High school workshops and city-wide conferences can do the job the best; state-wide meetings are wonderful, but only if all delegates are willing and able to assume the responsibility of representatives—that of taking the message and inspiration back to each student in their city●

Joint Program To Combat Teenage Tolls

In a joint effort to combat the teenage traffic accident toll, the American Automobile Association and the McGraw-Hill Book Co., New York, announced a long-range program to expand driver education in high schools.

"Significant savings in lives and property have been achieved as a result of driver education courses in our nation's schools during the past quarter century," said Russell E. Singer, AAA executive vice president. "Statistics show that teenagers are involved in twice as many accidents as all other drivers in proportion to their numbers, but we also know that the accident rate is cut in half among young people who have had formal training in driving."

First phase of the program will be McGraw-Hill's publication and distribution of the AAA textbook, *Sportsmanlike Driving.*

In addition, new approaches to the teaching of driving, utilizing visual aids and unique instructional and examination methods will be created for the purpose of improving driver education and expanding the number of high school courses.

Solutions to Neutralize Chem Lab Perils

A few cardinal rules to demonstrate and discuss can impress students and make high school chemistry a safe science.

By Theron V. Morrison

WHEN students report to a laboratory class for the first time, they are extremely curious and impressionable. What is the new course going to be about? What are the new kinds of apparatus they will learn to manipulate? Will it be an easy or a difficult task for them to learn? This attitude gives the teacher an opportunity to present, in a dramatic fashion, some safety precautions. Most of the students will be so impressed that they will not soon forget that: "Accidents are made; they do not just happen."

The types of accidents which occur with the greatest frequency or have the greatest potential danger should be stressed first.

It is of the utmost importance for the student to learn the proper way to heat a liquid in a test tube in order to prevent spurting, and also the direction in which the tube should be pointed. The potentially dangerous result of improper handling can be compared to Old Faithful. The teacher can hold an empty, clean test tube in the Bunsen burner flame, pointing it at his face to show students how a person could be scarred and/or blinded by hot chemicals, even boiling water. The teacher could have a student standing at the desk beside him so that when he turns the tube away from his own face he will point it toward the face of his partner (the student). Although the teacher pretends that he is unaware of what he is doing, the class will promptly tell him. Then, with tongue in cheek, the teacher attempts to correct the situation by turning the tube away from him and his partner but pointing it across the table toward the students on the other side.

The students seldom forget the reason why the mouth of the test tube should never be pointed toward anyone, themselves included.

Correctly putting right angle bends and thistle tubes through a rubber stopper is a technique that cannot be emphasized too strongly. This involves the proper way in which to hold the glass tubing, the use of the cork borer and the cork crusher, and the use of water as a lubricant.

Students should be told that acids and hot liquids should not be carried from table to table because of the danger of the glass breaking, especially when exposed to cool air currents. It should also be pointed out that chemicals, burners and inverted funnels should be placed far back on the table to lessen the chances of accidents. A student, while bending over to get equipment from a drawer, could run an inverted funnel into an eye, ignite his hair by getting it into a flame, or tip over a bottle of chemical on himself or his neighbors.

It should be emphasized that indiscriminate pouring together of chemicals can cause an explosion and is dangerous to all in the class. Failure to observe this cardinal rule should be sufficient cause for a student to be permanently expelled from a class. The teacher must, of course, secure the principal's approval if this procedure is to be put into effect. If a counselor or principal fails to support the teacher, it can be pointed out to them that in some states, if the science teacher is found negligent, he is legally liable in any court. A written notice to the effect that a student is breaking safety rules and is potentially dangerous to the class can be submitted to his counselor. When the teacher asks that the notice be put on file

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in case of future trouble, the student is always removed, since no one else wishes to assume legal responsibility.

Practically all counselors and principals are understanding and support a teacher in this respect. However, it is possible to encounter an occasional one who will not. It is also possible that a parent may not wish to cooperate, and the counselor is subjected to pressure from the teacher on one hand and the parent on the other. The written notice would help to call the attention of both the counselor and the parent to the fact that the teacher has the safety of the student uppermost in his mind.

Students should be taught that acid and alkali burns should be instantly placed under running water. This is better than losing precious time while the student, under tension, tries to remember and find the neutralizing agent. This water bath can be followed by having the teacher neutralize the burn by using a clean handkerchief or towel, wetting it, and pouring on a weak vinegar solution (acetic acid) if an alkali burn or 5 per cent solution of sodium bicarbonate if an acid burn. These reagents will be diluted enough to use on all parts of the body except the eye or mouth.

To dramatize the severity of acid burns it is effective to display a shirt, pair of trousers or dress that has been badly damaged by acids.

The chemistry teacher should discuss fully the dangers involved should amateurs make explosives. He can tell of cases with which he is familiar, read from a collection of newspaper clippings and perhaps have pictures to show the hazards involved. Students usually have no trouble getting the ingredients necessary to make gunpowder if they wish to do so. However, in the school laboratory it might be wise to keep all glycerine locked in the store room.

Also, to avoid explosions, the teacher should see that carbon is not put out with manganese dioxide and potassium chlorate.

The use of flammables should be discussed. The danger of fire due to their volatility should be reviewed. How to use a sandbath and waterbath deserves attention. High school students, generally speaking, probably should not be allowed to heat or distill large quantities of flammable liquids and oils.

Of particular importance to the teacher is the fact that students should not take large stock bottles of flammables such as carbon disulfide, gasoline, turpentine, etc. to their desks in order to pour out the few milliliters required for the experiment. In so doing they are getting too large a volume too near the Bunsen burner flame. This is one rule many students never seem to learn, and the teacher must constantly be on the alert for violations.

Before attempting to touch, student checks whether becker is heated by placing back of his hand close to container.

In the chemistry laboratory each student should be required to wear a rubber laboratory apron to protect himself against harmful and corrosive chemicals. Long sleeved jackets should not be worn and the shirt or blouse sleeves should be rolled up to the elbow. Many boys and some girls with long sleeved sweaters are reluctant to roll their sleeves. Therefore, adherence to this safety practice requires constant alertness on the part of the teacher. Anyone without an apron should not be allowed to remain at a laboratory desk. A good way to en-

force this safety habit is to require all students to wear aprons for all experiments without exception.

Original experimentation by the student in a high school chemistry laboratory is rare. It should be stressed, however, that original experiments are not to be performed except under the strictest supervision. The proposed experiment must first be reviewed and approved by the teacher. Next, it must be performed under the direction and supervision of the teacher who must be present at all times.

Some laboratory manuals will mark an experiment as one that should be demonstrated while another will indicate it as a student experiment. It is suggested that the teacher make a decision as to the method to be used depending upon available facilities and the caliber of the students in the class. If he decides to let the students perform the experiments, he must be unusually alert to spot possible danger. In any case, the students should be told that *teacher demonstration* experiments are not to be run by the students under any circumstances.

Since the beginning students can easily make a mistake in reading the names of chemicals, the teacher should write a few chemical names on the board: sodium nitrate and sodium nitrite, for example, to show the similarity in names of highly dissimilar compounds. After a student has studied radicals, he will quickly spot the difference between an *ate* and an *ite,* or a ferrocyanide and a ferricyanide. Avoiding such errors can be facilitated by having large, legible labels on all dry salts, reagents, and solutions. The name, formula and strength of all solutions should be included on the bottle labels. The student should be told to look especially for the difference between a dilute and a concentrated acid bottle. If stock bottles are used, the meaning of the color code of the plastic caps should be pointed out. To avoid mix-ups as well as spillage, one of the first rules for the beginning student to learn is to use care always in replacing the bottle cap as soon as the needed amount of chemical has been removed.

The pupil should consider everything in the laboratory as poisonous and should be cautioned not to taste anything unless under the direct supervision of the teacher. This procedure is based on the assumption that a teacher, in spite of all precautions, can never be sure that a bottle has not become contaminated.

In addition to these specific rules relative to the student in the laboratory, certain general procedures should always be followed.

Flammables and pure ethyl alcohol should be locked in a fireproof cabinet. Sodium, potassium and phosphorus should be included among these dangerous chemicals.

Potassium and sodium metals that are stored under kerosene should not be placed on the same shelf as phosphorus which is kept under water. Furthermore, inspections should be made periodically to see that the liquid level is sufficiently high.

Acid bottles should be placed in leakproof containers before being carried through the halls from the main stockroom to the laboratory. Such chemicals should be moved only when corridors are clear of students in order to prevent their being accidentally bumped and broken or spilled.

Each chemistry laboratory should have at least one hood. The teacher should instruct the students on the need for using the hood. In recent years, some laboratories have been built without a hood. Substituted in its place has been a high velocity fan that changes the air in the room more often than normally would occur. Consequently, gases like chlorine and nitrogen dioxide could be blown all over the room before being expelled. Experiments with toxic gases should be done directly beside the exhaust fan to prevent this.

Roughhousing in the laboratory should never be permitted.

All electric wiring should be inspected by the teacher. Properly insulated wire should be used together with the correct plugs. Bare wires should not be pushed into a receptacle. D.C. and A.C. receptacles should be different in structure so that they require different plugs. The teacher should turn on the electric panel himself. In that way he will be sure that a student working with a 6 volt D.C. current will really have 6 volts and not 120 volts.

In some schools, the science department and the art department work together to prepare safety posters which can be hung in the laboratories. If there is a series of them, they can be rotated.

Fire departments enforce an ordinance that limits the amount of flammables that can be stored in a science laboratory at any one time. This ruling makes it necessary that flammable liquids be available at a central storage point where they can be requisitioned at a moment's notice. Otherwise, important experiments might have to be omitted.

The use and location of the fire extinguisher, blanket and first aid kit should be explained.

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Snakes Are Safe

(but stick to cats, dogs)

By Jean Carper

SKUNKS, squirrels, rabbits, mice, turtles, snakes! What teacher has not seen them all lovingly displayed as "pets." Every child wants to show his teacher and classmates the skunk he "rescued" from its woodland nest or the baby monkey he got for Christmas.

These strange pets are cute. They are appealing. They may be educational. But they also can be dangerous.

Most wild pets, unless they are obviously babies, cannot be trusted around children, according to Marlin Perkins, director of the Chicago Park District's Lincoln Park Zoo. "The animals bite, scratch and are unbelievably tempermental," says Perkins.

Wild animals do not have the gentle dispositions of dogs and cats, Perkins warns. Skunks, rabbits, squirrels and raccoons are not to be trusted and monkeys are worst of all.

Of course, there are exceptions. Hamsters are loving and gentle. Most turtles, fish and parakeets can't do damage and snakes, surprisingly, make the safest wild pets.

A nonpoisonous snake, although not affectionate like a dog or cat, is interesting and contrary to common belief, is trustworthy as a Boy Scout. A snake can't bite, isn't temperamental and won't turn on you as other animals will.

Teachers should be especially cautious with monkeys. "When a monkey outgrows its cute childish behavior, it is dangerous," says Perkins. "What's more a monkey is unpredictable. It is sweet as can be one moment and a demon the next. Many persons have been bitten by monkeys."

Most animals will bite if aroused. Therefore, teachers should encourage children to handle all pets gently and stroke them lightly, simulating the mother's tongue. If an animal does bite a child, get the child to a doctor and keep the animal to be tested for rabies. This disease is a threat from animals captured in the wild and even those purchased in pet shops.

Why are most wild pets mean? Perkins explains it this way:

Wild animals follow a pattern of development just as humans do. Wild baby pets may be precious, cuddly and all sweetness. But just

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wait until hormones start changing and they enter that difficult age of puberty! Then they, like humans, assert their independence; they want to strike out on their own and if they are thwarted may turn on their keepers. "You can pick up a baby squirrel with perfect safety, but don't handle an adult. It will tear you up," warns Perkins.

A wild animal reaches puberty within several weeks or months and can literally become an adult over night. Consequently, a child should never be left with even a seemingly docile wild pet; the animal's mood may change like lightning.

For some reason snakes do not undergo these hormonal changes, so they don't become vicious.

Monkeys become especially antagonistic as they mature. They acquire determined personalities and detest being constrained. The Rhesus monkey grows so vicious and uncontrollable that it should never be permitted around children.

A teacher, confronted with any wild animal, should be wary. If the creature is obviously a baby, it's safe for children to pet. Otherwise, get the fellow out of circulation immediately. Confine it in a cage or box for children to watch, but not touch.

Here's one last tip from Perkins who keeps a Siamese cat: Encourage youngsters to stick to cats and dogs; they're best●

Grants from Center

SIX grants-in-aid, totaling $2,500, for full-time graduate study in safety education are offered by the Center for Safety Education, New York University.

Research, teacher preparation, personnel administration, public and private transportation are among the areas covered by the grants, made available by the Insurance Institute for Highway Safety. The assistantships cover tuition costs for two semesters and recipients are also assigned paying jobs.

In addition, the Center will award several grants of $2,500 for graduate work in the area of traffic safety management at state and metropolitan levels. Provided by the Esso Safety Foundation, the assistantships will be available to residents of Esso states.

Appointments are made each April, but applications are accepted at any time. Write: Walter A. Cutter, director, Center for Safety Education, New York University, New York.

Chem Lab Perils

(from page 10)

The teacher should show the students how to operate the fire extinguisher. But the primary responsibility should rest with the teacher. In case of fire, the students should evacuate the room. The teacher then should be responsible to judge whether the fire can be put out with the extinguisher on hand. A fire drill captain could be assigned to handle the extinguisher if the teacher is out of the room when an emergency occurs.

If a fire, even a small one, occurs in the school building, the fire alarm should be sounded at once and the school evacuated until the fire marshal declares it is safe to return.

Crowding in a laboratory is a hazard. This is equally true whether the crowding is due to too many tables and chairs, chairs of the wrong type that clog the aisles, or simply too many students. There should never be more students assigned to a laboratory than there are stations at which to work. In these matters, a teacher is dependent upon his department head. As far as the department head is concerned, regulating class size and equipment is generally easier said than done. He sometimes has trouble getting equipment designed specifically for the laboratory. He also has the perennial battle of keeping harassed counselors and principals from putting one, two or three extra students into each class. To the administrator, these few do not sound like many. But to the teacher of a laboratory class they represent a definite hazard as well as a cause of inefficient teaching. No student can do laboratory work without something to work with. It is as simple as that.

If the teacher's recommendations are ignored, it is often effective for him to file a written statement with the counselor stating that he cannot be responsible for accidents caused by or inflicted upon these extra students who have no stations at which to work.

Doubtless, the reader can add other safety precautions in addition to the ones mentioned in this article. Therefore, a list of safety rules should be prepared and distributed to each science teacher in every school system. Even the experienced teacher needs to review the list occasionally to help his students develop good safety attitudes. To do so might easily prevent the loss of a life, a case of blindness or a badly scarred face●

BULLETIN BOARD

Bell men show & tell

Children stared at the telephone repair man and as he climbed down the pole, they began firing questions at him—about his safety glasses, his tools and his job. Before he knew it—he had a large audience of children. He mentioned it to his supervisor, who called the school board. Soon telephone men were asked to share this safety-talk with students. Now such talks are available to all schools in cities with Illinois Bell.

Driver ed state aid

Sixteen states provide some form of financial aid for driver education, according to a recent summary by the American Automobile Association. The Department of Education administers in 15 of these, and 14 of these states give aid on a per pupil reimbursement.

Baltimore advisors

A safety advisory committee has been formed in the Baltimore Public Schools department of safety education. Meeting monthly, the committee will review problems, study accident facts, revise the handbook, review safety resource materials, indicate needs and aid groups developing pupil councils and safety patrols.

Survey toy accidents

Child accidents involving toys and other playthings will be surveyed for six months by the Florida Chapter of the American Academy of Pediatrics and NSC's Toy Safety Committee. Florida pediatricians will record data on their patients and the emergency wards of hospitals have agreed to participate.

N. J. curbs go-karts

What's being done to curb go-karts and miniature motor cars manned by children? NSC surveyed states and all 42 responding said present laws prohibit them from public roadways, since they're classified as motor vehicles. But so far, only New Jersey has a law forbidding anyone under 18 from racing or demonstrating the go-karts and little cars *anywhere*. This practically eliminates the use of the cars by New Jersey children—but elsewhere, little children are still racing around private lots, backyards and tracks.

Mich. teaches skid skills

Stimulated by the driver ed phase of the NSC winter driving tests last January, the Michigan Driver Education Association is conducting a similar training program. Driver ed teachers will learn how to teach winter driving skills to their students.

WON'T YOU WRITE US THE NEWS IN YOUR SCHOOL?

Destination: Drill

Screaming children and hysterical parents around a burning school can be disasterous. This plan prevents such a panic.

WHERE do your children go in case of a real fire in your school building?

We in Byram School, Greenwich, Conn. have a place in a home, church, or store for every class and its teacher. In addition, parents are informed of this place (not its telephone number—you can guess the reason for this) and we've designated a simple signal to inform pupils that they are to go to this assigned place.

Our regular automatic signal is a bell that rings 2-3, 2-3, 2-3. If this signal repeats itself as the children are filing out for the fire drill, all classes move quickly but orderly with the teacher from their assigned place on the school sidewalks to the home, church or store to which they are assigned.

Is this something new? I doubt it very much. I imagine that many schools practice drills to assigned, safe places removed from the school grounds. But I know that many, many schools practice fire drills only to stations on the school grounds. . .

To me, it seems just common sense that *every* school should have and should practice a plan which will take the children away from the burning building to a place where they can wait under cover and under supervision until their parents can come for them.

This leaves the firemen undisturbed by running, screaming children. It places the children in competent care away from the fire. During inclement or winter weather, what a blessing it is for parents to know that their children have marched briskly to a safe location, warm and protected from the weather. I rather think that every fire department that is called to a school fire would bless the school faculty that has safely removed the children *and* the hysterical parents who would otherwise be around the burning building in hordes seeking their children.

George Fraser is principal, Byram School, Greenwich, Conn.

At Byram School, we have our rehearsals to the off-the-school-grounds shelters during the nice weather in September and October and repeat them about twice on the first warm sunny days of spring. These drills are not really necessary for the children, but they enjoy the walk and of course enjoy missing some school work. The drills are held to remind teachers and parents of the location of the home, church or store where the children will be stationed in the event of a real fire. The parents need the reminder at least twice a year. We, of course, have regular fire drills more frequently.

We send a notice to each home in the spring and again in the fall. This bulletin includes the assigned location for each class, and asks parents to keep the chart. Parents are instructed to call for their children at the assigned place, not to come to the school grounds and not to rush in picking up the children, since they are safe. The notice suggests that parents bring wraps for their children, if on a cold day, since the students don't stop for wraps in drills.

As a new child is registered during the year, his parents are given the sheet with the fire station assignment. We have had many favorable comments from these new parents about our interest in the child's safety.

In our latest drill, I was watching the lines on the front of the building. My thought was to see how they started away when the bells continued to ring—then I would cut through the building to the parking lot on the other side, take my car and drive to the location of each class. I heard the sad voice of a little fourth grader as the bells repeated—"Oh, gee, it isn't a real fire, there goes Mr. Fraser back into the building."

Our location is on the busy Boston Post Road. Half of our classes must cross the Post Road to reach their assigned place. A pedestrian light has been installed for safety and is operated by a part-time special police officer. In case he is not on duty either for a drill or for the real

Location

By George L. B. Fraser

thing, our chief custodian drives to the light and operates it until all children have crossed or until the regular police arrive. In Greenwich, when the fire department in any section is called, the police are immediately called.

Our school has no direct signal to the local fire department, so the secretary has two duties in case of a fire: to dial the fire department and to call the Greenwich Police Department (who should have been alerted by the fire department, but we take no chances.) Both numbers are posted in large print along side of the secretary's phone.

This coming year or two we shall be particularly glad to have a real plan of action in case of fire. The town is spending about $300,000 to modernize our building and you know the tearing down and building up that goes on. Just one careless workman could start the fire and there will probably be about a hundred different workmen here at different times. We've even equipped ourselves with special whistles in case our bell lines are out of order as they may well be.

But to your problem—where do your children go in case of a fire in your school? This is a question every principal should be able to answer confidently because he has a plan and has practiced it. This is a question each parent should ask the principal. If the answer isn't that there is a planned place away from the school grounds, isn't it time everyone got busy?●

Continuity Problem Solved

SPEARHEADED by the need for continuity in a school safety program, a PTA group organized what the high school principal calls the major project of the year.

Faculty members, student body and the PTA share responsibilities in the four-pronged safety program for Mt. Pleasant high school, near Wilmington, Del. It all began when the PTA safety chairman, Charles Holder, Jr., racked his brain for some way to improve school safety. He wanted to "do more than just make an inspection or two."

Because a new safety chairman is appointed each year, the program lacked continuity. Holder saw the need for some continuing vehicle which would carry through each year so that new PTA committees could build on the efforts of the previous ones. For his answer, Holder adapted a structure used in industry—a central safety committee in the school with specialized committees made up of faculty members and students. After consulting with the principal, Kenneth E. Michael, and with much community support, the PTA worked out an outline for the central committee. Once the program was organized, the PTA turned it over to the principal.

Under the central committee, the traffic committee promotes safety practices in the high school parking lots, pedestrian discipline, traffic direction and patterns, marking and labeling of parking lots.

Another committee is in charge of preparing and enforcing safety practices on the baseball, football and soccer fields and tennis courts. The third committee is in charge of safety in the building, including stairs, halls, locker areas, shops, home economics rooms, cafeteria, auditorium and all classrooms.

There will also be a community safety organization. The steering committee will coordinate the efforts of the four divisions●

National Accident Fatality Toll

	1959	1958	Change
ALL ACCIDENTS	91,500	90,604	+1%
Motor-Vehicle	37,800	36,981	+2%
Public non-motor-vehicle	16,500	16,500	0%
Home	26,500	26,500	0%
Work	13,800	13,300	+4%

Note: The motor-vehicle totals include some deaths also included in work and home. This duplication amounted to about 3,100 in 1959 and 2,800 in 1958. All figures are National Safety Council estimates, except the 1958 all accident and motor-vehicle totals, which are from the National Office of Vital Statistics.

THE 1959 accident death total was approximately 91,500, about 1 per cent more than the 1958 toll of 90,604. Disabling injuries numbered 9,300,000, including 360,000 which resulted in some degree of permanent impairment—ranging from partial loss of use of a finger to blindness or complete crippling.

The trend from 1958 to 1959 was up. Deaths from motor-vehicle accidents increased 2 per cent and work deaths rose 4 per cent. Home and public non-motor-vehicle deaths remained unchanged.

The death rate in 1959 per 100,000 population was 51.9—the lowest rate on record. The next lowest rates are 52.3 for 1958 and 55.9 for 1954.

Accidents were the fourth most important cause of death, exceeded only by heart disease, cancer, and vascular lesions of the central nervous system.

Accidents were the leading cause of death among persons 1 to 36 years old (according to the latest detailed information, 1957). Among males alone accidents ranked first from age 1 to age 36.

Accident types that were most important in 1959 were motor-vehicle accidents and falls with 41 per cent and 20 per cent, respectively, of the death total. Fire burns and injuries associated with conflagrations caused 8 per cent of the deaths, and drownings another 7 per cent.

Deaths by Age Groups: Accidental deaths decreased in two age groups according to preliminary reports, 2 per cent in 25-44 group and 3 per cent for persons 65 and over. Deaths in all other age groups increased—6 per cent in the 0-4 group, 3 per cent for persons 15-24 and 4 per cent each in the remaining age groups, 5-14 and 45-64.

Age Group	1959	1958	% Change
0- 4	9,300	8,789	+6%
5-14	6,800	6,514	+4%
15-24	13,100	12,744	+3%
25-44	19,300	19,658	−2%
45-64	18,900	18,095	+4%
65 and over	24,100	24,804	−3%
Total	91,500	90,604	+1%

All Accidents

Killed—91,500, 1 per cent up from 1958.

Injured—9,300,000.

Cost—$12,600,000,000. Includes wage loss, medical expense, overhead cost of insurance for all accidents, interrupted production schedules, time lost by workers other than the injured, etc., due to work accidents and property damage in traffic accidents and fires.

Fatal falls numbered about the same as in 1958—18,300; burns went up 1 per cent to 7,400. Drownings were down 1 per cent at 6,500. Fatal firearms accidents went up 1 per cent to 2,200.

Home Accidents

Killed—26,500, the same as in 1958.

Injured—4,000,000.

Cost—$900,000,000.

Falls caused more than two-fifths of the deaths; burns, one-fourth; all other types, only one-third.

A decrease in the 65 and over age group offset increases in the other age groups. Almost half of those killed were persons 65 years old and older. More than a fourth were children under 15 years. The remaining fifth were persons 15 to 64 years old.

Motor-Vehicle Accidents

Killed—37,800, 2 per cent more than in 1958. Vehicle mileage total rose in 1959, bringing the death rate to 5.4—a new all-time low.

Injured—1,400,000.

Cost—$5,900,000,000, includes wage loss, medical expense, overhead cost of insurance and property damage.

A fourth of the deaths, 10,000, were from accidents in cities and towns with more than 2,500 population; three-fourths, 27,800, from accidents in rural areas and towns under 2,500 population.

There were approximately 7,700 pedestrian deaths, no change from 1958, and 30,100 non-pedestrian deaths, a 3 per cent increase.

Work Accidents

Killed—13,800. This was 500 more than the 1958 total.

Injured—1,950,000, about 150,000 up from 1958.

Cost—$4,100,000,000. Includes cost of interrupted production schedules, time lost by workers other than the injured, wage loss, medical expense and the overhead cost of insurance.

Total all-industry employment was about 3 per cent more than in 1958.

Public Accidents

(Not Motor Vehicle)

Killed—16,500, no change from 1958.

Injured—2,050,000.

Cost—$800,000,000.

There were sizeable decreases in railroad, water transport, and firearms deaths in 1959. Increases were recorded for air transport and other specified fatalities.

Only one catastrophe in 1959 caused more than 50 deaths. A scheduled airplane plunged into the East River in New York City, killing 65.

safety education
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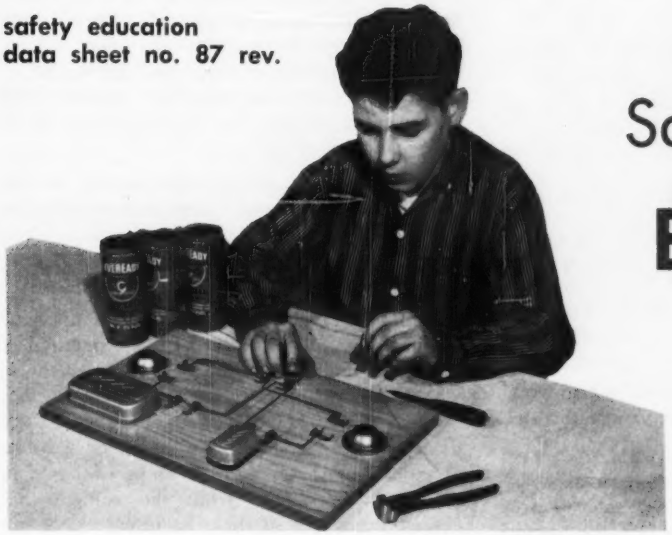

Safety in the Electrical Shop

The Problem

1. Safety in the electrical shop or area* is considerably different from safety in many other shop activities. The danger is usually not *visually* apparent as, for example, the recognized fact that a saw cuts, a welding flame burns or a knife is sharp. For this reason, safe practices in electricity must, to a large extent, be based on understanding basic electrical principles; and everything possible should be done to insure application of these principles in the physical arrangement, equipment and curriculum of the electrical area.

Equipment and physical facilities

2. Well-designed electric equipment can be purchased from commercial manufacturers. Many times, however, cost and individual initiative compel the instructor to improvise—to design and build his own. This is certainly not to be discouraged, since many installations do not have to be elaborate but can be very modest and simple. However, it *is* important that all installations, commercial and/or teacher-built, are as safe as possible.

3. Work surfaces should be covered with a material that is essentially non-conducting and fire resistant. Formica, tempered Masonite, or other similar covering materials are satisfactory.

4. Floor surfaces should also be non-conducting. If concrete has been used, it should be covered with rubber matting, rubber tile, linoleum or other similar tested materials. Asphalt tile is a questionable insulating material and should be used only if certified safe by the manufacturer.

5. Grounded objects such as radiators and pipes should be covered with electrical insulating material. If this cannot be done, the chance for accidental contact should be minimized as far as possible.

6. A carbon dioxide (CO_2) fire extinguisher should be placed in a conspicuous and convenient location. This type of extinguisher should be used with caution in confined areas. The carbon dioxide gas displaces air and it is possible to suffocate unless fresh air is immediately available.

7. All electric circuits available for experimentation should be plainly and correctly marked. Insofar as possible, voltages should be supplied at outlets which require special plugs for each voltage—6 volts DC, 115 volts AC, 220 volts 3 phase, etc.

8. Adequate and convenient storage facilities for supplies and equipment are essential, since neatness invites safety and helps keep the items readily available and in good condition. This also helps reduce the temptation to substitute an improper or dangerous item.

turn page

*Industrial arts electricity is sometimes taught in a so-called electrical shop but frequently is taught as one area in the industrial arts general shop.

This is a standard receptacle plug as recommended by the National Electrical Manufacturers Association for safety.

9. All tools should be maintained in good condition and stored in a convenient tool panel.

10. When possible, choose tools that have "built-in" electrical safety-insulated handles on screwdrivers, insulated test clips, etc. Power tools plugged into convenience outlets should be wired with three-wire service cords and grounding type plugs, of which an adequate number should be provided.

11. Instant heat soldering irons are very desirable, not only because they save on electrical consumption, but also because they present a minimum fire hazard. If an ordinary slow-heat soldering iron is used, be sure to have an approved storage rack and unplug the unit when not in use. A pilot light type indicator could serve as an efficient reminder.

12. A *good* ground — driven earth, water pipe, etc.—should also be provided for this area.

13. Test and demonstration equipment should be designed so as not to require male plugs on each end of the cord.

14. Adequate laboratory space is essential to reduce the possibility of accidents.

15. Adequate ventilation, heat and light will provide safer working conditions.

16. Wiring in the electrical shop should be installed according to the National Electrical Code.

17. Many electrical projects can best be constructed by using such machines as a brake, shear, lathe, drill press and punch. It is important that all machines be in good operating condition and be operated according to accepted safe practices.

18. A metal storage cabinet should be provided for the various finishing materials (varnish, wrinkle paint, etc.) frequently used.

First Aid

19. An adequately stocked first aid kit should be in a "convenient to get at" part of every electrical shop. It would be desirable to have the phone numbers of the school nurse, one or more doctors and the ambulance service listed on the inside of the cover for immediate use in case of emergencies.

20. Report all accidents in writing to the proper authorities and correct any deficiencies immediately.

21. The instructor should be proficient in the treatment of minor cuts and bruises. He should also be similarly proficient in applying artificial respiration by the accepted method of mouth to mouth resuscitation. In case of shock, where the breathing stops, it is imperative that artificial respiration start immediately—do not delay because seconds count. Send for a doctor as soon as possible. Care must be exercised in removing the victim from the voltage that caused the shock so that the rescuer does not come in contact with the dangerous voltage also.

Procedure

22. All experiments should be performed with as low a voltage as possible. When the principle can be demonstrated or explained with 6 volts, why use a more dangerous 115 volts?

23. Instructional material should be well-written, with explicit directions for performing the experiment, emphasizing all safety precautions.

24. Use many well-designed visual aids to explain the principles of electricity.

25. In most instances, the instructor should check experimental circuits before they are "plugged in" by the students.

26. If the circuit permits, disconnect electric and electronic devices from the source of electricity before working on them.

27. Discharge condensors before there is a chance for accidental contact and at the end of experiments.

28. Remove rings, metal watch bands, etc., before working on electric—especially automotive—circuits, since a short and the resulting high current through any of these items could cause a serious burn.

29. Do not charge a storage battery or inspect its condition near an open flame.

30. If it is necessary to have the motor running when working on an automotive electric system, be sure that you work out of doors or

where the exhaust fumes are adequately removed from an inside area.

31. When checking any AC-DC electronic devices, use an isolation transformer in order to isolate chassis ground from line ground and thus eliminate this shock hazard.

32. Any experiments and/or demonstrations involving the use of acid, such as an explanation of the operation of a lead-acid cell, should be accompanied with precautions concerning their corrosive and reactive danger. It should be emphasized that when it is necessary to dilute H_2SO_4, *always* do so by adding the acid to the water.

33. Electrical projects should be designed and constructed to provide maximum safety for the fabricator and user.

34. When possible, associate safe practices in the electrical shop with similar situations in the home and everyday living.

35. Horseplay of any type—"shocking," running, scuffling—should not be tolerated.

36. Although not a physical danger, strong magnetic fields can cause considerable damage to an individual's watch. When working with magnetic fields, remove your wrist watch from the immediate area.

37. Rosin core solder, never acid core, should be used for all electrical work.

38. In electroplating, extreme care should be exercised in handling the solutions since poisonous cyanide compounds are necessary ingredients in several instances.

For further information:

39. *Education for Safety Through the School Shop,* Association of Casualty and Surety Cos., and Center for Safety Education, New York University, 1952, Pg. 68-80.

40. *Industrial Arts,* New York City Board of Education, 1950, Pg. 43-51.

41. *Safety Guide for Shop Teachers,* San Francisco Public Schools, 1955, Pg. 93-96.

42. *School Shop Safety Manual,* New York City Board of Education, 1948, Pg. 83-94.

43. *Shop Safety Education,* The University of the State of New York, Albany, 1949, Pg. 148-51.

This data sheet was prepared for the National Safety Council by Ira H. Johnson, head, industrial arts department, State College, Mankato, Minn.

Safety Education Data Sheets available are:

#429.04-		#429.04-		#429.04-	
-19	Alcohol and Traffic Accidents	-91	Home Lighting	-63	School Bus Safety: Educating Pupil Passengers
-78	Amateur Electricians, Safety for	-41	Home Workshops	-73	School Bus Safety: Operating Practices
-26	Animals, Domestic	-42	Horseback Riding	-67	School Dramatic Productions
-37	Animals in the Classroom	-62	Iceboxes and Refrigerators, Hazards of Discarded	-47	School Fires (Rev.)
-57	Auto Shop (Rev.), Safety in the	-79	Industrial and Vocational Education Programs, Coordinating Safety in	-85	School Lunch Room, Safety in the
-66	Baby Sitting (Rev.)	-70	Kites and Model Airplanes, Safety with	-40	School Parties
-49	Bathroom Hazards	-23	Laboratory Glassware	-83	Sheet Metal Shop, Safety in the
- 1	Bicycles	- 7	Lifting, Carrying and Lowering	-17	Sidewalk Vehicles
-18	Camping	-53	Machine Shop (Rev.), Safety in the	-84	Skiing Safety
-14	Chemicals	- 2	Matches	-28	Small Craft
-59	Chemistry Laboratory, Safety in the High School	-36	Motor-Driven Cycles	-71	Sports: Baseball, Safety in
-86	Cigarette Fire Hazards	-55	Motor-Vehicle Speed	-77	Sports: Basketball, Safety in
-80	Counselors and Helpers in Summer Camps	-31	Night Driving	-72	Sports: Football, Safety in
- 6	Cutting Implements	-16	Nonelectric Household Equipment	-75	Sports: General Practices, Safety in
-68	"Do It Yourself," Safety in	-82	Office Safety	-54	Summer Jobs: laborers, home yard, service-stations
- 9	Electrical Equipment	-65	Part-Time Jobs: Food Handling, Safety in	-45	Summer Jobs—Farm
-87	Electrical Shop, Safety in the (Rev.)	-13	Passenger Safety in Public Carriers	-27	Swimming
-34	Electrical Storms, Safe Conduct in	-10	Pedestrian Safety	-15	Tools, Hand
- 5	Falls (Rev.)	-92	Pesticides, Safe Use of	- 4	Toys and Play Equipment
-60	Farm Mechanics Shop (Rev.), Safety in the	-29	Play Areas	-89	Track and Field Events
- 3	Firearms	-69	Playground Apparatus	-33	Traffic Control Devices
-25	Fireworks and Blasting Caps (Rev.)	-74	Playground Surfacing	-48	Unauthorized Play Spaces
-44	Fishing, Hook and Line	- 8	Poisonous Plants (Rev.)	-88	Vision and the Driver
-12	Flammable Liquids in the Home	-35	Poisonous Reptiles	-76	(Bad) Weather Conditions Safety in
-61	Floors in the Home	-21	Poisons, Solid and Liquid	-39	(Bad) Weather: Hazards, Precautions, Results
-20	Gas, Cooking and Illuminating	-93	Promoting Safety Through School Newspapers	-90	Wearing Apparel, Flammability of
-50	General Metals Shop, Safety in the	-24	Public Assembly, Places of	-56	Welding and Cutting Safely (Rev.)
-64	Graphic Arts Shop, Safety in the	-51	Pupil Excursions, Safety in	-30	Winter Driving
-81	Gun Clubs: Their Organization and Activities	-38	Railroad Trespassing	-32	Winter Sports
-22	Gymnasium (Rev.), Safety in the	-11	School Buses—Administrative Problems (Rev.)	-58	Winter Walking (Rev.)
-52	Highway Driving, Rules, Precautions			-46	Wood Shop, Safety in the
-43	Hiking and Climbing				

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STRUCK

can be eliminated with proper training in the minor, minor leagues.

By Eldon Hauck

TWO outs. The score was tied. The count was three and two. Peggy leaned expectantly toward home plate, her foot remaining in contact with the third base.

Johnny gripped the bat nervously, determinedly. The score, the count, Peggy's being on third base—his situation flashed through his mind as he waited for the next pitch.

"Here it comes!"—and Johnny forced his bat further to the rear. Its end pointed back and up, hung there menacingly. The ball sped forward, true to its mark.

The boys and girls crowding the third base line held their breath.

The moment of impact, bat against ball, was here. But, there was no sound of bat on ball impact—only the resounding smack of the ball against the catcher's glove.

But now something else was happening!

Johnny's bat was sailing through the air, end after end, toward the boys and girls crowding the third base line.

Reactions were varied. Some of the pupils dropped low to the ground, some gave to the right, some to the left, and some were frozen to immobility.

The bat sailed on—into their midst.

The accident report form listed the cause of the injury as **struck by bat.**

Another (accidental?) injury attributed to the "struck by bat" group, only one of a long list of causes. This also can join the ranks of countless others that "need not have happened." It's easy to correct a situation such as this after the accident has happened. Simply place the spectators (player-participants) behind protective cover.

But let's look at the "struck by bat" cause from another standpoint, that of elimination before occurrence. Consideration must be given to two factors: (1) the batter and (2) the proximity of player-participants in relation to the batter.

For every individual who uses a bat, there is a "first time" experienced when the bat is used in a game involving others. Normally, instruction in the proper use of the bat will occur in the elementary grades, and such instruction will be given by the classroom teacher, the physical education specialist or the recreation leader.

Children can learn how to use a bat through observation and practice, but they *must* be taught how to use it safely. Generally, they have no idea of the injury a misused bat might inflict. It makes no difference how many times they hear "don't do this - - don't do that"; such

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By Bat

statements are not too effective. The positive, more objective approach is necessary to teach the safe use of the bat.

Assuming that we are supplied with the proper equipment (bat), with its being in good condition (knobbed, unsplintered, and unbroken) and its size commensurate to its user, the first emphasis of instruction should be that *the bat is used for batting a ball only.*

Instruction should constantly stress a firm grip on the handle, maintaining the firm grip throughout the swing and until the batter has reached, or failed, his objective (hitting the ball).

A firm grip is essential to good hitting. When batting at home plate, the bat is held firmly in the hands until after the ball has been hit. It is then dropped to the ground outside a baseline as the batter, turned into base runner, starts his run to first base.

The first game for pupils to experience using a bat at home plate might be Batting Tee Softball, in which the catcher receives the pitched ball, tees it up, and steps back. The batter then hits it off the tee.

In this game, the teacher can stand outside the first base line away from home plate and tell the batter, "After hitting the ball off the tee, hand the bat to me."

The batter's power of concentration becomes centered on handing the bat to the teacher, especially if he has been informed that he will be *out* unless he complies.

As the batter's capabilities allow his progression into the realm of the "pitched ball" hitters, the game of softball must receive consideration.

Now his responsibility in regard to the bat may be changed from handing it to the teacher to that of placing it on the ground in a designated area. (This may be a circle, three feet in diameter, placed three feet outside the first base line, five feet from home plate.) Failure to leave the bat in or touching this area would result in his being out!

Elementary exercise in batting: student bats ball off tee, then hands bat to teacher standing outside first base line.

An analysis of the results of the foregoing practices will reveal that the batter's objective of hitting the ball has been shifted to a double objective and now includes what he is going to do with the bat after the ball has been hit. The added objective will not detract from his prime objective of hitting the ball, and will arouse his concern in riddance of the bat. ("What would be the point in hitting a home run, if I'm out before getting to first base?")

Such procedures, occurring early in the pupil's batting experiences, can be habit-forming practices in the safe use of the bat. It will not be too difficult for him to respond safely when he is faced with a batter's full responsibility of conduct, outside and away from the realm of his instructor.

"Struck by bat" can be eliminated almost entirely as a cause from the batter's standpoint; and it is here where greatest emphasis should be placed: (1) what the bat is used for, (2) a structurally safe bat, (3) the proper size bat for its user, (4) a firm grip while using, and (5) what to do with it after it has been used.

The odds favoring "struck by bat" can be further reduced by considering the spectators and/or player-participants (members of the team at bat awaiting their turn).

The persons most susceptible to being struck by a thrown bat are the player-participants.

turn page

Their safety can best be assured if they learn always to stand behind backstops and netting.

The diagram of the softball diamond includes restraining lines, necessary if there is no backstops or netting. Player-participant safety is assured if they will remain behind his line on the ground; and they can be taught to remain behind such a line.

The shaded portion of the diagram represents the danger area. The majority of the thrown bats and foul balls will travel from the home plate through this area. The safety zones (triangles) extend off either side of the backstop. That side of the triangle closest to the base line is the restraining line for the player-participants. The important thing is to establish a definite line behind which player-participants can await their turns at bat.

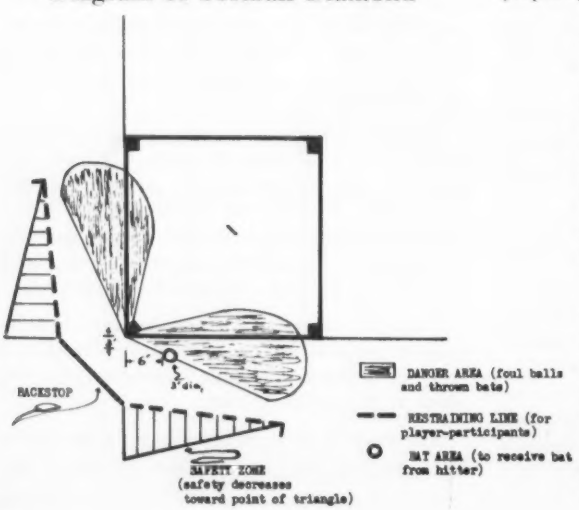
The chance of accident will be further decreased if the restraining line adjacent to the first base line is used (assuming the majority of player-participants to be right-handed batters).

Included in the diagram is the bat area (circled) into which the bat is dropped when the hitter turns base runner.

Teaching the pupils to remain behind the restraining line is entirely dependent upon the teacher. This task is not difficult if approached objectively, firmly, and with definite purpose (safety).

"The batting team is to remain behind this line. You may cross this line only when it is your turn to bat or when your side is retired and you take the field. This rule is for your safety. If you break the rule . . ."

Diagram of Softball Diamond



Penalties are left to the individual teacher to be adjusted according to needs.

Jack's team is at bat. Bill's team is in the field. Mary goes to bat and the remaining members of her team are behind the restraining line. Play starts and progresses. Mary has a count of three balls and one strike.

At this point, one (or more) of her teammates (out of curiosity or in excitement) advances over the restraining line.

"Time!" calls the teacher. "One out!"

The violators return to position behind the restraining line and play resumes. Mary hits the next pitch and takes first base. Jack comes to bat and strikes out. Two outs. Jim comes to bat, hits a single and advances Mary to third.

With a chance to score Mary from third base, Jane comes to bat. The team's best hitter, she awaits the pitch with extreme confidence. The ball is delivered. She swings, connects and the ball sails out over the heads of the infield; a home run for sure.

But some of her teammates have comes across the restraining line again. They're so excited!

"Time!" calls the teacher. "Three outs!"

The children are dejected. It isn't fair. Their team would have had two runs and been leading. The teacher calls the fielding team into home plate. Members of both teams listen as the rule is explained again. The retired team takes the field. Play resumes.

Eventually, the restraining line will be treated with respect. What was once an individual responsibility has now become a team responsibility. No member is going to place his team in jeopardy from this standpoint. The rule will be accepted as fair because it affects everyone in the same way.

The penalty for violation of the rule is left to the person in charge. It may be one out, or it may be the retirement of a team from bat. However, it should be a standing rule for every group using the facility, whether during the school's physical education program or after school.

Children are willing to learn correctly and safely if they are given the opportunity. Children are willing and will abide by safety rules if the penalties of breaking such rules are meted out indiscriminately. Children are willing to help eliminate "struck by bat" and make it a thing of the past. After all, they're the ones who will benefit most●

The Title Page

Books, pamphlets and films of interest to safety educators

By Lois Zearing
Director, NSC Library

Accidents

Work Injuries to School Lunchroom Personnel. George R. McCormack. Presented to the Annual Convention of the Association of School Business Officials, Miami, Fla., October 11-15, 1959. (Mimeographed)

A preliminary report on a study by the Bureau of Labor Statistics at the suggestion of the American School Food Service Association based upon records for the year 1958.

Driver Education

The High School Student and the Automobile. 1960. 21pp. Safety department, The Allstate Insurance Cos., Skokie, Ill.

A study of the relationship between scholastic records of high school students and their use of the family car. Conducted at Niles Township High School, Skokie, Ill., May, 1959.

Learning to Drive Safely. A. R. Lauer. Rev. 1960. 136pp. Burgess Publishing Co., 426 S. 6th St., Minneapolis 15, Minn. Price $3.50.

A text manual and guide to the science of driving instruction with suggestions for training areas and evaluation techniques for courses in high schools, colleges and teacher training institutions.

Enforcement

Whistle Bait. Roma Reid Turkel. 1959. 14pp. Paulist Press. (Paulist Fathers) 401 W. 59th St., New York 19, N. Y. Price 10¢.

A pamphlet designed for teenagers to give them a better understanding and an appreciation of the law enforcement agencies.

Fire protection

How to Organize a Sparky's Fire Department. 1959. National Fire Protection Association, 60 Batterymarch St., Boston 10, Mass.

A community fire safety program for children.

Inspection blanks for schools. 2pp. National Board of Fire Underwriters, 85 John St., New York 38, N. Y.

Ring the alarm! A memo to the schools on fire and human beings. 1959. 19pp. Educational Facilities Laboratories, Inc., 477 Madison Ave., New York 22, N. Y.

Some suggestions for principals and other school officials on the management of people to meet the emergency of school fires.

Lightning

Lightning Facts and Figures . . . for personal safety and protection for all types of buildings. 18pp. Lightning Protection Institute, 53 W. Jackson Blvd., Chicago 4, Ill. Price 5 cents.

Vocational education

School Shop Safety. April 16-18, 1959. 61pp. U. S. Department of Health, Education and Welfare, Office of Education, Washington 25, D. C. (OE-84003-Circular No. 609)

Report of a national conference on school's contribution to occupational safety through shop safety programs.

Exodus in

Whether called school bus aids, safety helpers or bus patrols, students should be trained to handle bus accident evacuations. Here are three demonstrations of different procedures.

POPULATION explosion has as its fallout crowded cities, expanding suburban areas and increased traffic problems. All three create additional problems in pupil transportation.

With the need for more school buses goes the need for preparing for the safety of the buses' young passengers. In the event of an accident or the driver's inability to function, the students' lives are endangered if they remain on the bus. This article deals with the ways three school districts handle emergency evacuations. Many other districts over the country, of course, have similar programs. Our readers may like to hear about others in future issues.

Via a two page bulletin, the Lehigh Valley (Pa.) Safety Council standardized a bus evacuation drill program for all schools in its area. Urging schools to immediately set up the program, the bulletin read: "It is of utmost importance that these instructions be followed to the letter. Any deviation during practice will result in some being trained to react differently from those who are drilled in the standard procedure. When the two groups are mixed, there will result, in a real emergency, confusion and panic."

This program puts the driver in complete command, stopping the bus, setting the parking brake, turning off motor and on the red flasher lights. After he blasts one loud warning with his whistle, he announces, "Remain seated for instructions, this is an emergency drill." Then facing the front of the bus, the driver stands beside the first line of seats. A tap on the shoulder of the person next to the aisle indicates that those seats are to be evacuated while the students adjacent are kept seated by the driver's signal: hand out, palm down. The driver continues back to each row until all have left the bus. He takes a second check and then joins the group. Followed efficiently, this procedure reportedly takes 52 to 65 seconds.

In case of fire or suspected fire, the same procedures are followed with the driver's holding the fire extinguisher and possibly fighting the fire from his stand in the bus, while the students evacuate. The same method is used if leaving from the emergency door. If both doors must be used, the driver will appoint an older student to handle the front door, while he controls the emergency door.

Unlike the next two programs, this system provides no procedures for a substitute to handle the duties of the driver in case he is incapacitated.

A school in Manitowoc, Wis., went one step further than Lehigh Valley. Besides telling—they showed how their program works with the help of the county superintendent of schools. The county-wide demonstration attracted bus

Driver feigns unconscious; student in Manitowoc (Wis.) program halts bus, pulls parking brake and turns off ignition.

Emergencies

Safety helper places warning signal certain distance from disabled bus, to alert oncoming motorists of the danger.

drivers, bus operators, school superintendents, principals and safety personnel. Hopefully, all were to take the idea back and drill their own students.

Because emergencies are usually caused by, or result in the driver's being unable to function, this pupil removal plan can be conducted with and without the driver's help. The drills included both front and rear end collision evacuation. Ten students are involved. A simulated accident was demonstrated:

When the driver was "knocked unconscious" in the "accident," one student, trained to bring the bus to a halt, pulled the parking brake and turned off the switch. Two others opened the door and assisted passengers in getting out. These two also know how to chop an opening through the windows, if both doors are inoperable. They aided youngsters leaping off the bus to prevent sprains and tragic pile-ups.

Two other students ran to the nearest phone to call the police, and four carried warning flags—two ahead of the bus and two to the rear—to alert oncoming motorists. These four are trained to stand off the road a certain distance from the bus to wave the red flags. In addition to these nine students, this drill program suggests that one student be trained to use the fire extinguisher.

Students leaving the bus located themselves at least 75 to 100 feet from the bus and stood off the highway. The 10 children with duties joined the group after their jobs were com-

Two others open rear exit door and aid passengers to prevent any sprains, falls or tragic pile-ups; others call police.

Evacuation successful, passengers line up off road away from bus. Two in front wave warning flags to motorists.

pleted. They cannot return to the bus until instructed—and they are told not to move the bus driver unless there is a fire. Complete evacuation took 39 seconds.

A meeting was held after the demonstration for further discussion of the drills. It was suggested that drivers conduct a drill with each separate load of students, and this should be done in early fall. In addition, provisions should be made with nearby homes to provide shelter for students if the weather is severe. Movies were taken of the drill as a possible teaching aid in the schools.

Because the same school bus is also used for all school excursions in Manitowoc, a similar demonstration is planned for all staff members. Each teacher could then take charge during an emergency. A demonstration at each school for the children to witness is also being considered.

Bus safety helpers

Children of Perry County, Ind., are receiving valuable training to prepare them for almost any emergency arising with a school bus. This program, called the School Bus Safety Helper Program, is sponsored by the General Electric Co. in Tell City, and was demonstrated for delegates to the National Safety Congress last October.

Students walk briskly away from bus in Chicago demonstration. Helpers aid crippled girl from "wrecked" bus.

Quite similar to the drill procedure in Manitowoc, this helper program, however, involves assigning responsibility to only two students, who are the *safety helpers.*

With one stationed at the front and the other in the rear of the bus, the safety helpers are trained how to turn off ignition key and apply parking brake, how to operate both doors, safely open windows with an ax (only if doors don't operate), and where to place emergency flags and flares. After they have aided the students in evacuating the bus, one helper remains with the group while the other takes another student and seeks help.

The helpers are specifically taught not to act without the consent of the driver unless the driver is physically unable to give instructions. The program specifies at least one helper on the bus throughout the entire route, so that an important factor in selecting a helper is where the student lives. Student's size and ability are of course considered, and his parents must give their permission. Training classes were held during school hours at each school in the county. Helpers were given copies of the nine-point program and provided with arm bands and white plastic helmets to distinguish them as helpers.

Whether called safety helpers, school bus patrols or school bus aids, there are other similar programs throughout the country. But many more programs for aiding and training students to evacuate a bus safely are needed in numerous school systems. Possibly one of these could be adapted to fit the need of your school district●

IMPORTANT NEW DEVELOPMENT IN SCHOOL TRAFFIC SAFETY

Cair Cap SCHOOL SAFETY PATROL HELMET*

CHECK THESE DESIGN AND CONSTRUCTION FEATURES:

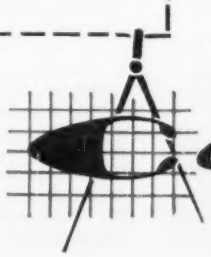
- Fiberglass-reinforced polyester resin construction—withstands the roughest usage.
- Hard surface resists soiling, can be safely washed when necessary.
- Color formulated right into helmet—can't chip, flake or peel off.
- Sanitary plastic webbing adjusts to any head size.
- Helmets nest within each other, require minimum storage space.
- Unique "space age" styling affords excellent weather protection, permits wearing Cair-Caps over knit caps in winter.

Motorists just can't miss seeing the Cair-Cap school safety patrol helmet. Its eye-catching color and distinctive styling make crossing guards more visible—makes them easier to identify—*from a much greater distance* than any other item of the patrol uniform. Even in rain, snow, dusk or fog, drivers receive greatly increased warning to "watch out for children."

But that's not all! Beside signalling "caution" to motorists, the Cair-Cap builds an *esprit de corps* that maintains a young patrolman's interest in his job and makes him put forth his best efforts at all times. Recruitment and turnover problems are ended for good.

Available in either "Highway Yellow" or high-visibility white, the Cair-Cap will improve the effectiveness of any school's traffic safety program.

Don't delay. Write today for complete information.



air

CHAMBERLAIN AVIATION, INC.

Akron Municipal Airport • Akron, Ohio

1773-A

inventory of safety check points in

Business Machines Classrooms and Offices

prepared by the Joint Safety Committee
of the American Vocational Association—National Safety Council

_____ Date_____
(Location)

Introduction

The business machines classrooms in schools are becoming more like business offices each year. As more complex business machines are added, the safe use and care of the machines become more important in the course of study.

Using this Inventory as a regular part of the instruction program will alert students in the classroom or office to the need of thinking and practicing safety when using business machines. Business offices can employ this Inventory to assist in improvement of safety practices.

Directions for Use

Who takes the Inventory?—It is recommended that a student or office safety committee be formed after safety has been discussed.

When to take the Inventory?—As a minimum, it should be taken semiannually. The addition of a business machine would call for a quick review of the check points which apply.

How to go about it?—Procedures for taking an Inventory of safety check points should be planned in advance. No check point should be overlooked, and every recommendation for improvement should be understandable.

Follow-up.—The current Inventory should be compared with previous Inventories in order that progress may be measured and special attention given to conditions and locations which are accident producers. Unsafe conditions should be corrected and unsafe equipment taken out of service.

Procedure:

Check each safety point below and circle the appropriate letter in the following safety scale:

C — Commonly practiced (needs no attention)
P — Periodically practiced (needs some attention)
N — Not practiced (needs attention)
O — Omit (does not apply at present)

In cases where "P" or "N" are circled, the committee should write the necessary recommendation in the space provided at the end of the section. The recommendation should be carried out as soon as practicable.

A. General Physical Condition

1. Business machines, desks and other equipment are arranged so as to conform to good safety practices. ..... C P N O
2. Aisles are clear and adequate..... C P N O
3. Illumination is safe, sufficient and well placed ..... C P N O
4. Ventilation is adequate and proper..... C P N O
5. Air in room is free from excessive dust, smoke, etc. ..... C P N O
6. Temperature control is accurate..... C P N O
7. Fire extinguishers are of proper type, adequately supplied, properly located and maintained ..... C P N O
8. Teacher and students (supervisors and employees) know location of and how to use proper type for various fires..... C P N O
9. Teachers (supervisors) know the procedure in the event of fire including notification of the fire department and the evacuation of building..... C P N O
10. Number and locations of all exits are adequate and properly identified..... C P N O

11. Proper procedures have been formulated for emptying the room of occupants and taking adequate precautions in case of emergencies ..... C P N O
12. Lockers are securely fastened and inspected regularly for cleanliness and fire hazards ..... C P N O
13. Locker doors are kept closed..... C P N O
14. Walls are clear of objects that might fall ..... C P N O
15. Utility lines are properly identified.... C P N O
16. Floors are not slippery..... C P N O
17. Fire doors are in good operating condition ..... C P N O
18. Stair treads are safe..... C P N O
19. Stair railings are secured..... C P N O

B. Housekeeping

1. There is adequate and proper storage space for equipment and materials..... C P N O
2. Desks are kept orderly..... C P N O
3. Corners are clean and clear..... C P N O
4. Floors, walls, windows and ceilings are cleaned periodically ..... C P N O
5. Rags for dusting and cleaning are properly stored ..... C P N O
6. Flammable liquids necessary for the operation of a machine are properly labeled, stored and used under safe conditions (safety cans with flame arrestor)..... C P N O
7. Stoddard type and nontoxic solvents are used for cleaning purposes..... C P N O
8. Machine and extension cords are not hazardous to passing traffic..... C P N O

C. Equipment

1. Machines are in safe working condition. C P N O
2. Machines are arranged so that operators are protected from hazards of other machines, passing students or employees..... C P N O
3. Students or employees are taught to operate machines by using only the keys, buttons, knobs or levers provided..... C P N O
4. All guards are used..... C P N O
5. All equipment control switches are easily available to operator..... C P N O
6. All machines are "locked off" when instructor is out of room..... C P N O
7. Proper brushes are used for cleaning equipment ..... C P N O
8. Adequate supervision is maintained when students or employees are using office equipment ..... C P N O
9. Machines are shut off while unattended. C P N O
10. Storage facilities are adequate for equipment and supplies not in immediate use.... C P N O
11. The paper cutter is placed and used in a safe location..... C P N O
12. The tacking machine is properly stored and used with staples designed for it..... C P N O
13. Chairs, stools and desks are checked for loose bolts, etc..... C P N O
14. File drawers and cupboard doors are kept closed ..... C P N O
15. Single files are carefully loaded and inspected regularly for balance to prevent overloaded top drawers from tipping over cabinet when opened. Banks of file cabinets are bolted together..... C P N O

D. Electrical Installation

1. All switches are enclosed..... C P N O
2. There is a master control switch for all electric equipment ..... C P N O
3. Power driven equipment is disconnected when cleaning or repairs are being made... C P N O
4. Electric circuits are not overloaded. (See building engineer.) ..... C P N O
5. Electric outlets and circuits are properly identified ..... C P N O
6. All electric extension cords are in safe condition ..... C P N O
7. All machine switches are within easy reach of operator..... C P N O
8. Individual cut-off switches are provided for each machine..... C P N O
9. All electric equipment is properly grounded ..... C P N O

E. Personal Protection

1. High heeled shoes and other unsafe footwear are strongly discouraged..... C P N O
2. Desk drawers are maintained free of hazards such as unguarded razor blades, loose pins, etc. ..... C P N O
3. Hazardous jewelry, such as long necklaces and bracelets, are not permitted around motor driven equipment..... C P N O
4. Clothing of students is free from loose sleeves, flopping ties, loose coats, etc..... C P N O
5. Disinfectant for cleaning earphones and mouthpieces of transcribing equipment is used periodically ..... C P N O
6. Prolonged or repeated breathing of vapors of typewriter and machine cleaners is to be avoided..... C P N O
7. Protective skin creams or lotions are provided and used..... C P N O

F. Instruction

1. Students and employees are taught to care for machines..... C P N O
2. Visual aids on office safety are used in instruction ..... C P N O

turn page

3. Students are taught safe conduct in the classroom ..... C P N O
4. Students are taught to report hazards... C P N O
5. Tours are taken of offices as a means of studying safety practices..... C P N O
6. A record is kept of safety instructions... C P N O
7. Safety committee members are rotated.. C P N O
8. Teachers practice best safety procedures at all times..... C P N O
9. Conducted fire drills periodically under varying, unannounced times and conditions which simulated actual fire situations, including blocked exits..... C P N O

G. Accident Records

1. There is a written statement outlining the proper procedure when and if a student or employee is seriously hurt..... C P N O
2. Accidents are reported to the proper administrative authority ..... C P N O
3. Accident reports are analyzed for instructional purposes and to furnish the basis for elimination of hazards..... C P N O

H. First Aid

1. First aid facilities are available..... C P N O
2. Qualified individuals are designated to administer first aid. A list of such persons is conspicuously posted..... C P N O
3. What-to-do-in-case-of-emergency instruction is provided ..... C P N O

Recommendations

S-1655-A

lower elementary

safety lesson

Safe Play in Spring

It is Saturday morning.
Breakfast is over.
Our morning chores are done.
What shall we do now?
Where shall we go?

Fun in the Park

The park is a good place to play.

There are teeters and swings.

There is a big slide.

But there is no one to watch us.

Will we be safe? What does this month's picture say about safe play? We will be safe if we remember the rules. They are the rules we learned at school. See if you can help name them:

Here are the words to write in the spaces. Talk over your answers.

Turns Feet Push Stand Up Time Front

1. Take _____ at the slide.
2. Don't _____ anyone.
3. Go down _____ first.
4. Both persons get off the teeter at the same _____.
5. Don't _____ _____ when swinging.
6. Don't cross in _____ of the swings.

In the Spring we often fly kites.

We fly them in a park or an open field.

We do not use *tinsel* or *metal strings.*

We should not let the string get *wet.*

If there is a storm, we might get a shock.

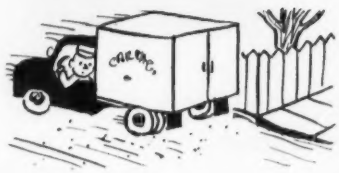
Published by the National Safety Council. Price $.28 each for 10 to 49 subscriptions; minimum order 10; lower prices for larger quantities; order by stock no. 461.01-1. Write the Council, membership department.

Prepared by James Mann, principal, Hubbard Woods School, Winnetka, Ill.; past general chairman, Elementary School Section, National Safety Council.

A Spring Hike

On a Spring day it is fun to hike around.
There are many places to go.
Some of these might be dangerous.
We must be careful.
Some places we should not go at all.
Let's talk about places that might be dangerous.

Alleys



There may be trucks here.
They may be backing up and not see us.
Alleys are narrow.
There isn't much room to pass.

Dump Grounds

There may be broken glass.
There may be metal with sharp edges.
There is often rusty wire and tin cans.
There may be piles of hot ashes.

Railroad Tracks

We should never walk or play on tracks.
We should never play around railroad cars.

Construction Projects

This means where something is being built.
There may be a deep hole.
There may be a huge pile of earth.
Machines may be working.
There may be a house partly built.
We should never play near these.

Some Signs for Safety

Here are some signs we often see.
Can you read each one?
Can you tell what each one means?

Make some Signs for Safety for your classroom

April 1960

upper elementary

safety lesson

S-1655-A

Safety in Spring Time

It is Spring. The snow is gone.
It is a time for adventure.
We can fly kites.
We can play baseball like the boys in our monthly picture.
We can go on adventure hikes.
It is also a time to stop and think.
What about accidents?
We don't want to spoil our fun.
We had better review the safety rules:

What About Kites?

A wet or a metal string could draw electricity. This is dangerous.
What could happen? _____.
What kind of string should we use? _____.
Power lines carry electricity. We should fly kites _____ from power lines.

Anyone for Baseball?

It is a good day for a baseball game.
Where shall we play?
Play where the ball will not go into the _____.
What other rules shall we follow?
Do not stand too close to the _____.
The catcher should have a _____ and a _____.
Don't let the bat fly _____.

(Can you answer these questions? Ask your teacher.)

SIGNS FOR SAFETY: Do you know the meaning of safety signs?

Match the signs below with their meanings:

1. DANGER —Please do not come onto these grounds.
2. ENTER AT YOUR OWN RISK—You might get hurt here.
3. NO TRESPASSING —You might get hurt inside this place.
4. DANGER: KEEP OUT —If you go in here, you take your own chances.

(Answers on the next page.)

Published by the National Safety Council. Price $.28 each for 10 to 49 subscriptions; minimum order 10; lower prices for larger quantities; order by stock no. 461.01-2. Write the Council, membership department.

Prepared by James Mann, principal, Hubbard Woods School, Winnetka, Ill.; past general chairman, Elementary School Section, National Safety Council.

Safety in Hiking

Do you feel adventurous?
Do you want to explore new places?
Do you know about the dangers?
Make a list of dangers to avoid. Tell why they are dangerous.

Junk yards 1. Things that cut _____

2. Puncture _____

3. Scratch _____

Old refrigerators _____

Trees, high walls _____

Gravel pits, ponds, creeks _____

Caves _____

Piles of sand, sawdust, cinders _____

Bridges, railway tracks _____

Construction projects _____

Alleys _____

Hitching rides _____

Do you also know about unsafe drinking water, poisonous plants such as *poison ivy, poison oak?* Adventures can be fun if we know about nature, if we avoid risks and if we use good judgment about what we do. The careless fellow or the "show-off" sometimes comes to grief. He spoils the fun for himself and for his friends too.

Answers to SIGNS FOR SAFETY

1. DANGER ..... You might get hurt here.
2. ENTER AT YOUR OWN RISK. . If you go in here, you take your own chances.
3. NO TRESPASSING..... Please do not come onto these grounds.
4. DANGER: KEEP OUT ..... You might get hurt inside this place.

April 1960

S-1656-A

junior high school

safety lesson

Teenage Driving

Drivers' Self-Ratings

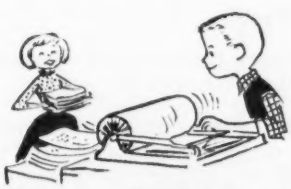
Probably none of you is eligible to drive as yet, but here is a survey you can conduct—the results of which should help you become a good driver. First of all, select at random names of:

(1) *One hundred or more* high school students who have a driver license—*not just learners' permits.*

and/or

(2) *One hundred or more* adults in the community who are licensed drivers.

After the names have been selected, ditto questionnaires in the following manner:



Self-Rating of Driving Ability

Because of the tremendous number of deaths and injuries (approximately 1,500,000 each year) caused by automobile accidents, the _____ (your grade) of _____ (your school) is trying to analyze the problem in order to help develop plans to help reduce automobile accidents. Our first step in this study is to make a survey of how people evaluate their own driving ability.

Will you, therefore, rate yourself in one of the following by placing a check mark under the rating you feel best describes *your driving ability.*

Above Average		Fair	
Excellent	**Average**	**Poor**	

Compute An Average

The questionnaire can be typed five or six times on one stencil, the stencil run off, and the dittoed pages cut so that you will get five or six questionnaires to one sheet of paper.

After you have obtained the self-ratings from the people you surveyed, find the average self-rating by assigning numerical equivalents to each rating: poor = 1, fair = 2, average = 3, above average = 4, excellent = 5.

Poor	1
Fair	2
Average	3
Above Average	4
Excellent	5

After you have obtained an average, discuss the results in your class.

(a) Discuss what "average" means.

(b) Discuss why the "average" figure you obtained through your survey is above or below what the "expected" average is.

(c) Discuss how the self-ratings are indicators of attitude.

More than likely your survey will indicate that most people consider themselves "excellent" or "above average" drivers. If this is true, it indicates that most people have the attitude—"It's the other fellow who can't drive — I'm good." Unfortunately, "the other fellow" probably also rated himself "above average" or "excellent."

Discuss this month's visual aid. What attitudes are being displayed? How might this driver rate himself?

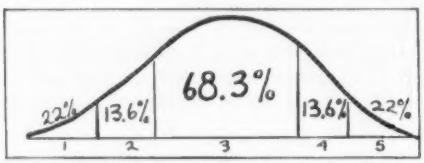
Published by the National Safety Council. Price $.28 each for 10 to 49 subscriptions; minimum order 10; lower prices for larger quantities; order by stock no. 461.01-3. Write the Council, membership department.

Prepared by Dr. Vincent McGuire, associate professor, Secondary Education, Department of Education, University of Florida, Gainesville, Florida.

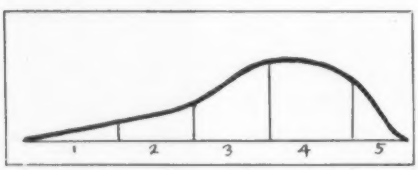
Follow Up

(a) If the results of your survey indicate a higher average rating than normally expected, plan on how you can help drivers realize that they must re-analyze their attitudes concerning their own driving ability.

One way to do this is to plan a talk to be given to the group who took the test. A good start would be to explain that in a large survey (the larger the better) the results should—if put on a graph—resemble a bell curve. Get your mathematics teacher to help you make some visual aids



for this. After you have clearly explained this aspect of mathematics, then discuss the results of your survey—again using a graph of the *actual* results.



The next portion of your talk should be about how the results of your survey indicate that one of the major causes of automobile accidents is that almost every driver believes he is always right and other people are wrong.

Discuss the importance of attitude in becoming a really good driver.

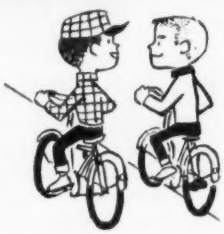
(If it is inconvenient to give a talk, then prepare the same material for publication in your local or school newspaper.)

(b) If the results of your survey indicate that most people believe they are "average" or below in driving ability, make a second survey to find out the reasons for the average or low ratings. After the results of the second survey are in, determine the most prevalent causes of poor driving and follow the "talk" or "write-up" procedure outlined in (a) above. Enlist the aid of your local safety council and police department.

A Bicycle Safety Project

Because of the many bicycle accidents, various communities sponsor programs to help reduce such accidents. During the Spring of 1959, the Junior Woman's Club of Gainesville, Fla., used the following plan to develop more interest and skill in bicycling.

A roving photographer took pictures of actual traffic violations committed by bicyclists. The pictures of the violations were printed in the daily newspaper for a week—with a suitable write-up of the violation. In order to prevent undue embarrassment the faces of the student violators were blanked out, or the pictures were taken from behind. After a week of such pictures, a Saturday was devoted to bicycle checks, and safety instructions were given by a representative from the police department.



Riding abreast is dangerous

Plan with your school authorities now to carry out a similar program.

Bicycle Test

Instructions: Underline the proper words so that the statements are true.

1. When the rider sits on the saddle with the heel of one foot on the low pedal, the leg, thigh and heel should form a (slightly curved) (straight) line.

2. The seat should be (parallel) (about a 20′ angle) to the ground.

3. The upper part of the body should be inclined slightly (forward) (backward).

4. The handlebar grips should be at (right angles) (about 45′ angles) to the handlebar stem, and at the (same) (a higher) level as the seat.

Answers: 1—straight; 2—parallel; 3—forward; 4—right angles; same.

Many service clubs, PTA Councils, and other organizations furnish information on bicycle safety. Check with persons active in these organizations to see what is being done to make bicycling safe. Talk with police officials also to determine what laws and ordinances are on the books concerning bicycle traffic.

April 1960

senior high school

safety lesson

S-1656-A

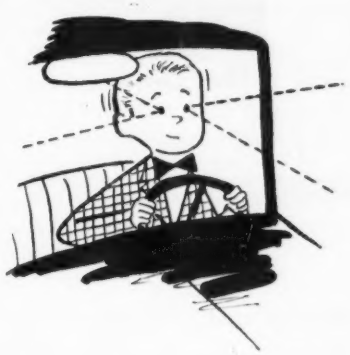
Teenage Driving

Tips for Teenagers

In order to improve your driving ability, here are five simple tips that will help:

1. *Have a broad view* — be aware of what is all around you—sides, back, *and* front.

2. *Look ahead*—know and be ready to react to traffic changes 10 or more cars ahead of you. Don't rely only on the driver of the car just in front of you.



3. *Have a "roving eye"*—if you, periodically, move your eyes to the left, to the right, and to the rear view mirror you will find it restful—don't stare fixedly at the road ahead of you.

4. *Make sure others see you*—use your horn if you are not certain that motorists and pedestrians know that you are there. Use arm signals and signal lights—don't stalk the highways like a silent Indian in search of game.

5. *Have alternate plans*—make allowance for time, room and maneuverability so that you have several ways to avoid accidents instead of just one—don't put all your eggs in one basket.

Study this month's visual aid. Name as many driving errors as you can shown in this picture.

Thought Problems

Most accidents are caused by thoughtlessness. In the following accounts of typical driving situations, indicate:

1. If the suggested action is "Right" or "Wrong."
2. Why?

A. Bill was driving a group to the Spring Dance sponsored by the school. He was following Tom's car. One of the riders in Bill's car said,

"Bill, I wish you wouldn't follow Tom so closely. If he has to jam on his brakes, we'd pile into him—we're only about three car lengths behind him and we're doing 60 m.p.h."

"Oh for goodness sake," said Bill, "Why don't you think things through? Tom has the same make car I have. It's brand new like mine, and he's as good a driver as I am. When I see his brake lights go on, I'll jam on mine—and we'll stop, still three lengths apart. Can't you see that? Don't you ever use logic?"

Right_____ Wrong_____ Because:____

_____

_____

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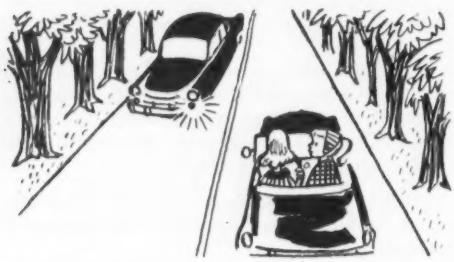
Prepared by Dr. Vincent McGuire, associate professor, Secondary Education, Department of Education, University of Florida, Gainesville, Florida.

B. Sue and Mary were driving along an unfamiliar road on their way to a school baseball game. A car approaching them had its left turn signal light blinking. The road appeared to be a straight half-mile stretch with no other roads leading into it. Mary said,

"Sue, look at the car approaching us—he forgot to turn off his signal light. Flip your left turn signal light on to show him his is on."



"O.K." said Sue, "I've done the same thing myself when the turn wasn't sharp enough to cut off the light when I straightened out."

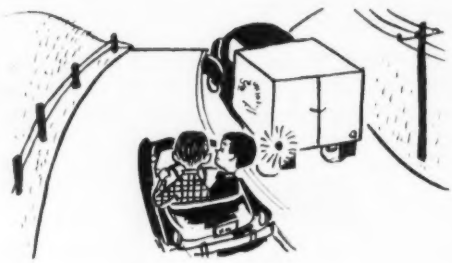
Right_____ Wrong_____ Because:_____

C. Joe and Pete were in a hurry to get to a district student council conference. They still had 20 miles to drive, but they were being delayed by a truck in front of them. Finally, going up a hill, the truck driver turned on his rear left turn signal light. Pete said,

"Go around him, Joe, he's signaling that it's all clear for you to pass."

"Right," said Joe, "I'm glad he's considerate enough to give us the high-sign."

Right_____ Wrong_____ Because:_____



Answers

A. Wrong. When Bill sees Tom's brake lights go on, Bill's *reaction* time (especially at 60 m.p.h.) is insufficient to stop his car in time.

B. Wrong. What if the approaching car were to turn left (in front of Sue's car) into a hidden lane because the driver saw Sue's left light blinking?

C. Wrong. Some truck drivers follow the practice of signaling for the driver behind to pass; some truck drivers signal that they are going to make a left turn—how do you tell the difference? Play it safe—don't pass until you *know* it's safe.

Got School Parking Problems?

Do you have the problem of "Hot-Rod Harrys" or "Scratch-Off Sams" or "Tire-Burning Terrys?" Don't let your school grounds serve as an arena for automotive mayhem. Institute a program for safe driving on your school grounds—as well as for other places. It can be done. For some good pointers on such a program, write to Margaret L. Johnson, Director of Driver Education, Glenbrook H.S., Northbrook, Ill. Find out what the Glenbrook H.S. students did at their school for their school.

New Products

SCHOOL SAFETY PATROL HELMET

Designed to provide more effective warning to motorists to "watch out for children," a new school safety patrol helmet combines distinctive, easily identified styling with high-visibility color, which catches the eye even under the most adverse weather conditions. Designated The "Cair-Cap" by its manufacturer, the cap is made of fiberglass-reinforced polyester resin to withstand the roughest usage. The "Cair-Cap" is available in either "Highway Yellow" or high-visibility white. Color is formulated right into the resin before the helmet is made, and because it is an integral part of the unit, cannot chip, crack or peel off.

A sanitary, easily-cleaned polyethylene webbing, anchored securely within the helmet, is adjustable so that the "Cair-Cap" will fit any head size.

Chamberlain Aviation, Inc., Akron Airport, Akron, Ohio. (Item 1).

AUTHENTIC TRAFFIC SIGNS INCLUDED IN SAFETY TRAINING PROGRAM

A set of authentic traffic control signs one-half the regulation size, a four-sided Stop and Go signal with push-button control, and an illustrated instruction manual, are included in the new Safety Training Program for primary grades. An optional canvas floor cover with streets and railroad crossing stenciled on it, enables students to act out various traffic situations.

National Mfg. & Equipment Co., 406 Argonne Rd., Warsaw, Ind. (Item 2).

VELOUR TEXTURE SOLID COLORS IN FLAME-RESISTANT CURTAINS

Four new "muted" finish velour texture solid colors are added to the line of DuPont flame-resistant vinyl stage curtain material for school use. The material is engineered for permanent flame resistance, dimensional stability and economy of maintenance. The new colors include Royal Garnet, King Blue, Provincial Green and Empire Gold.

E. I. du Pont de Nemours & Co., Room D-8033, Wilmington, Del. (Item 3).

SAFE-T-GLUE

Safe-T-Glue is a new Vinyl general purpose adhesive, which is completely safe—even for children. It is non-toxic, non-flammable, non-staining and odorless. Leaves no mess, since it cleans up easily with plain water. It is a rapid-setting adhesive with great strength and versatility. The bottle comes complete with handy applicator brush in cap.

W. J. Roscoe Co., 475-485 Kenmore Blvd., Akron 1, Ohio. (Item 4).

SAFETY EDUCATION—NEW PRODUCTS **APRIL 1960**
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More about Patrols

Sacramento, Calif.—I read "We Threw Away the Crutches" in the March issue with a great deal of interest, and I am sure that our organization would agree that we want to protect children only as long as it is necessary.

Our organization has had a long standing policy on school safety patrols which states that it "is now, as it has been in the past, a staunch supporter of the school safety patrol movement." It believes that the proper function of the patrol is to aid in the direction and education of pupil pedestrians, but it takes the stand that children should not assume adult responsibility in directing traffic.

In our Manual, in the Guide for Local Safety Chairman, we state: "Aid your school in the organization of safety patrols . . . and encourage children and youth to belong." I have seen the safety patrols render services that could not be performed by the program described in the article by Mr. Wallace. For instance, I have seen them corral dogs that were frightening little kindergartners and first graders and help little tots who have fallen or who have become confused and lost in their efforts to get home.

The part of the Phoenix program that did appeal to me was the participation of the parents in the safety program, and I am sure this would have lasting values for we are aware that too often parents are inclined to disregard the safety rules being taught in the schools. I believe this involvement of parents would be valuable in conjunction with safety patrols and hope that more schools would make an effort to do this.

I feel sure your article has stimulated discussion among many groups, and this is healthy. You are to be congratulated on publishing it!

Mildred Bevil
National Congress of Parents and Teachers

Washington, D. C.—School safety patrols as used as stated in Creighton's views (forum in print, "Protection Without Education?, Feb.) point out the shirking of responsibility by schools. Reports submitted in the AAA Pedestrian Program reveal that numerous areas have little or no safety education in their teaching of subjects. Basically, if education could accomplish the Creighton Plan, it seems we could also do without all traffic laws and enforcement. As a matter of curiosity, I checked the 1957 and 1958 accidents for the area and find that no reduction was made in the 5 to 14 age group.

To fairly evaluate the Phoenix program as reported by Mr. Wallace in the March issue, it is my opinion that the entire area should be involved. Reports indicate that there are 54 elementary schools in that city, but only seven have been used to arrive at a decision to the effect that "the present program . . . has been proven . . . to have an educational advantage over previous methods of instruction." If so, why wouldn't the entire Phoenix school system have adopted this new way?

Walter E. Morris
American Automobile Association

Baby Sitting

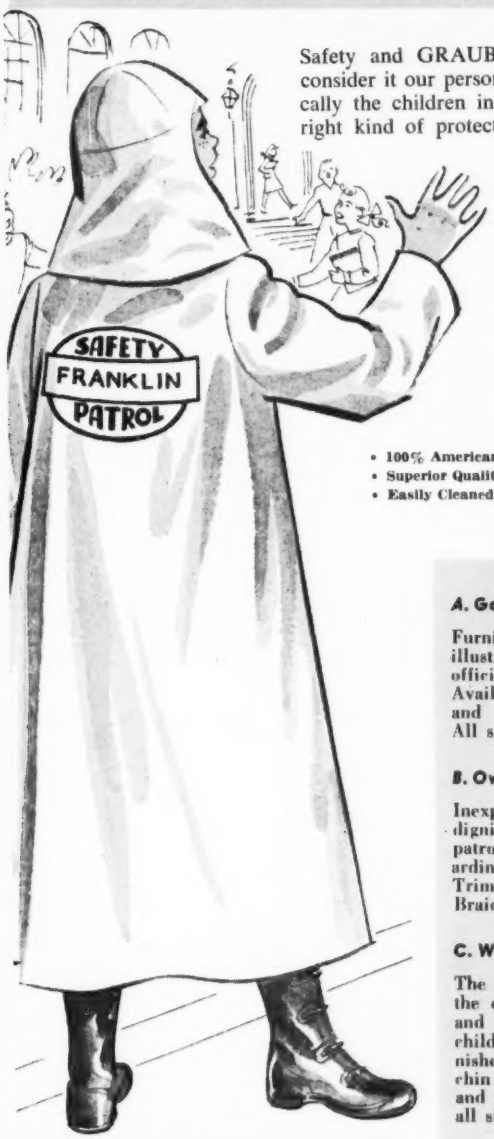
Evanston, Ill.—The Academy is interested in your article in the March issue concerning baby sitting. I think this will be an important contribution furthering sound education of both parents and baby sitters in their mutual responsibility to children. I have written separately for copies to distribute to the Academy's Committee on Accident Prevention.

Robert G. Frazier, M.D.
American Academy of Pediatrics

Coming in May

- Report on the Office of Education's Conference on Occupational Safety—and what has been done since the 1959 conference as reviewed at the President's Conference on Occupational Safety in March.
- Data sheet on safety in archery.
- The only listing in the country of all the safety courses for educators offered over the nation during this summer.
- How to drownproof yourself by a simplified controlled breathing course.
- Unique program in a California district installed seat belts for all teachers.
- Article for teachers to prepare their students for safety in the outdoors.

Your Children's Safety is Our Business!



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SAFETY EDUCATION CHICAGO, ILL. APRIL, 1960 Vol. 39, No. 8 Section 2

Safe Places

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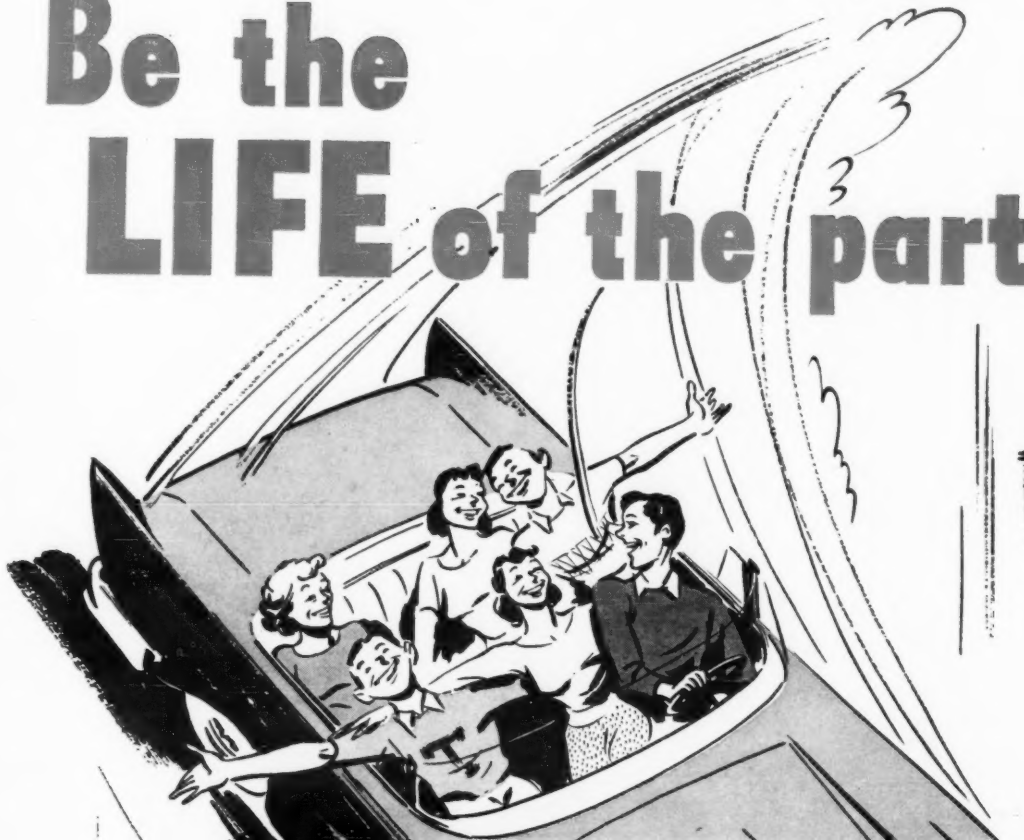

not the DEATH!

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